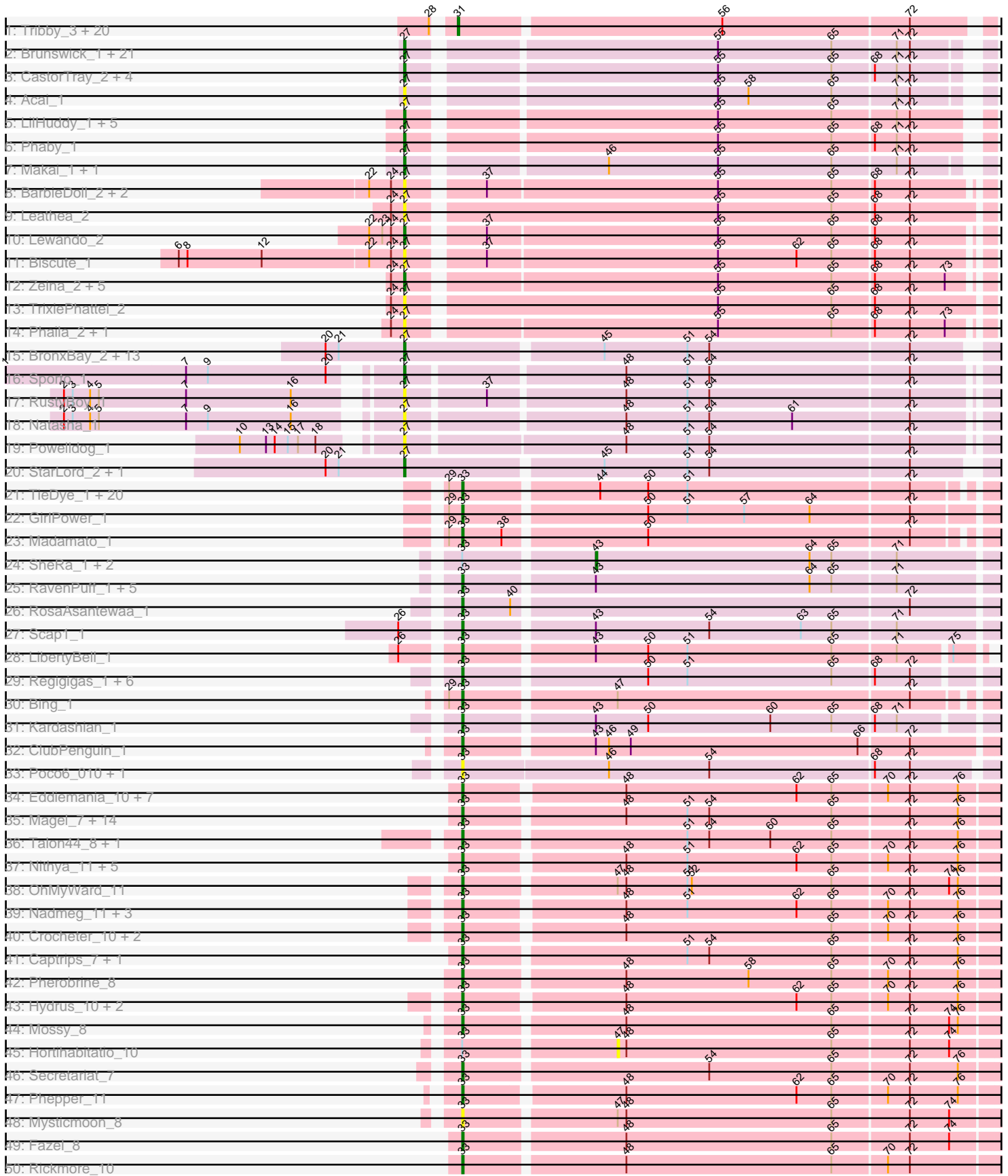
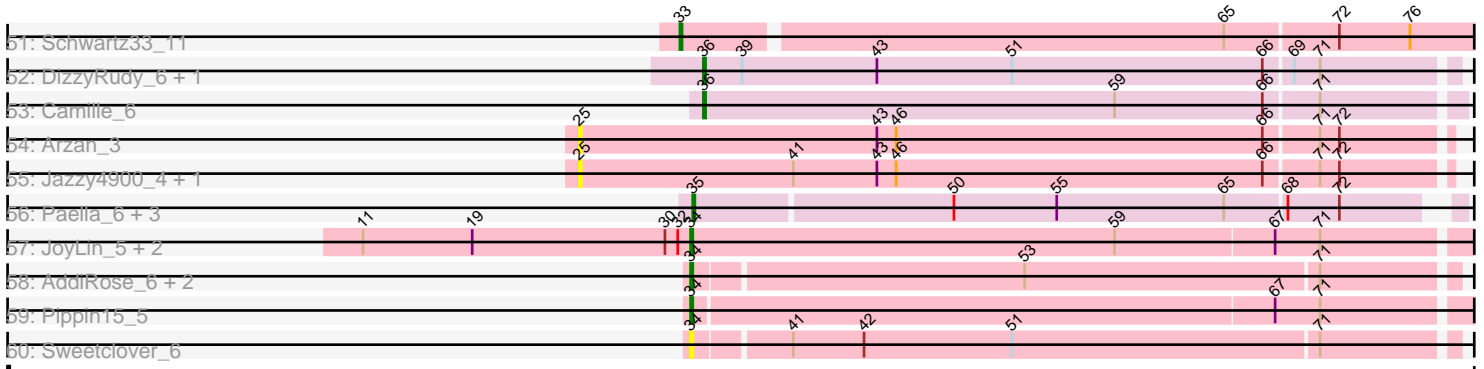


Pham 217614



Pham 217614



Note: Tracks are now grouped by subcluster and scaled. Switching in subcluster is indicated by changes in track color. Track scale is now set by default to display the region 30 bp upstream of start 1 to 30 bp downstream of the last possible start. If this default region is judged to be packed too tightly with annotated starts, the track will be further scaled to only show that region of the ORF with annotated starts. This action will be indicated by adding "Zoomed" to the title. For starts, yellow indicates the location of called starts comprised solely of Glimmer/GeneMark auto-annotations, green indicates the location of called starts with at least 1 manual gene annotation.

Pham 217614 Report

This analysis was run 03/28/25 on database version 593.

Pham number 217614 has 211 members, 45 are drafts.

Phages represented in each track:

- Track 1 : Tribby_3, Bowling_2, KeaneyLin_2, Mooshroom_3, Kardesai_2, Heisenberger_3, Circum_3, JEGGS_3, Xenomorph_2, Dynamite_3, Arcadia_3, Benllo_2, GoCrazy_2, Nason_3, NapoleonB_3, Cheesy_3, Elsa_3, Hankly_2, BenitoAntonio_3, Correa_3, Mudcat_3
- Track 2 : Brunswick_1, Gordon_1, Loretta_1, Issa_1, MiniBagel_2, ElephantMan_1, CapnMurica_2, Caterpillar_2, Tatanka_1, Teacup_2, Tenno_2, Inked_2, DevitoJr_1, Ingrid_1, Darby_1, Trustiboi_1, Zippen_2, LucySwiss_1, Nightmare_1, Niktson_1, MediumFry_2, Breylor17_1
- Track 3 : CastorTray_2, AreFloNak_1, ScienceWizSam_2, Nivinsha_1, Synepsis_1
- Track 4 : Acai_1
- Track 5 : LilHuddy_1, Tokki_1, Chlochlo_1, Bouchard_1, Giantsbane_1, Shepard_1
- Track 6 : Phaby_1
- Track 7 : Makai_1, Truckee_1
- Track 8 : BarbieDoll_2, Renaldo_2, Kinny_2
- Track 9 : Leathea_2
- Track 10 : Lewando_2
- Track 11 : Biscute_1
- Track 12 : Zeina_2, Tenney120_2, KevinMinion_1, Uzumaki_2, Argan_1, GantcherGoblin_1
- Track 13 : TrixiePhattel_2
- Track 14 : Phaila_2, Navi1117_2
- Track 15 : BronxBay_2, Djungelskog_2, Salk_2, HerbBucket_2, Stayer_2, Egad_2, Shiba_2, Raunak_2, Boog_2, MrAaronian_2, Michelle_2, Linda_2, ProfFrink_2, DoctorPepper_2
- Track 16 : Sporto_1
- Track 17 : RustyBoy_1
- Track 18 : Natasha_1
- Track 19 : PowellDog_1
- Track 20 : StarLord_2, Sloopyjoe_2
- Track 21 : TieDye_1, Esketit_1, Hoshi_1, Popy_1, FidgetOrca_1, FrodoSwaggins_1, Rima_1, CherryBlossom_1, TonyStarch_1, Indigenous_1, Meibysrarus_1, Spectropatronm_1, IceWarrior_1, HazuAndZazu_1, Maya_1, TaidaOne_1, Jaylociraptor_1, DrGrey_1, OlympicHelado_1, Namu_1, Soshi_1
- Track 22 : GirlPower_1
- Track 23 : Madamato_1
- Track 24 : SheRa_1, GoblinVoyage_1, HotFries_1
- Track 25 : RavenPuff_1, PherryCruz_1, Doxi13_1, Annihilus_1, Bilo_1, Moozy_1

- Track 26 : RosaAsantewaa_1
- Track 27 : Scap1_1
- Track 28 : LibertyBell_1
- Track 29 : Regigigas_1, Miek_1, Thiqqums_1, CricKo_1, FromIndy_1, SendItCS_1, Rainydai_1
- Track 30 : Bing_1
- Track 31 : Kardashian_1
- Track 32 : ClubPenguin_1
- Track 33 : Poco6_010, Pepy6_008
- Track 34 : Eddiemania_10, Aflac_11, Jodelie19_11, BluerMoon_11, OlgasClover_11, MajinBuu_12, TenaciousP_11, Figliar_11
- Track 35 : Magel_7, Conley_7, Trufflozitus_7, NoPickles_7, Dancer_7, FortCran_7, Gravy_7, Odesza_7, Artorias_7, Gill_7, Tanis_7, Roney_7, Petite_8, JulesRay_7, Kerry_7
- Track 36 : Talon44_8, Perkunas_9
- Track 37 : Nithya_11, Chikenjars_11, Duffington_11, Citrus_10, AlainaMarie_11, EndAve_11
- Track 38 : OhMyWard_11
- Track 39 : Nadmeg_11, Vardy_11, Burley_11, Runhaar_11
- Track 40 : Crocheter_10, Madvan_11, Kenosha_8
- Track 41 : Captrips_7, Avazak_7
- Track 42 : Pherobrine_8
- Track 43 : Hydrus_10, Zeph_10, Untouchable_10
- Track 44 : Mossy_8
- Track 45 : Hortihabitatio_10
- Track 46 : Secretariat_7
- Track 47 : Phepper_11
- Track 48 : Mysticmoon_8
- Track 49 : Fazel_8
- Track 50 : Rickmore_10
- Track 51 : Schwartz33_11
- Track 52 : DizzyRudy_6, Damascus_6
- Track 53 : Camille_6
- Track 54 : Arzan_3
- Track 55 : Jazzy4900_4, Sunny4976_3
- Track 56 : Paella_6, Qui_6, Elver_5, Gandionco_5
- Track 57 : JoyLin_5, Yotsuba_5, Eevee_5
- Track 58 : AddiRose_6, Serenabean_6, Daddyjeff_6
- Track 59 : Pippin15_5
- Track 60 : Sweetclover_6

Summary of Final Annotations (See graph section above for start numbers):

The start number called the most often in the published annotations is 33, it was called in 84 of the 166 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Aflac_11, AlainaMarie_11, Annihilus_1, Artorias_7, Avazak_7, Bilo_1, Bing_1, BluerMoon_11, Burley_11, Captrips_7, CherryBlossom_1, Chikenjars_11, Citrus_10, ClubPenguin_1, Conley_7, CricKo_1, Crocheter_10, Dancer_7, Doxi13_1, DrGrey_1,

Duffington_11, Eddiemania_10, EndAve_11, Esketit_1, Fazel_8, FidgetOrca_1, Figliar_11, FortCran_7, FrodoSwaggins_1, FromIndy_1, Gill_7, GirlPower_1, Gravy_7, HazuAndZazu_1, Hoshi_1, Hydrus_10, IceWarrior_1, Indigenous_1, Jaylociraptor_1, Jodelie19_11, JulesRay_7, Kardashian_1, Kenosha_8, Kerry_7, LibertyBell_1, Madamato_1, Madvan_11, Magel_7, MajinBuu_12, Maya_1, Meibysrarus_1, Miek_1, Moozy_1, Mossy_8, Mysticmoon_8, Nadmeg_11, Namu_1, Nithya_11, NoPickles_7, Odesza_7, OhMyWard_11, OlgasClover_11, OlympicHelado_1, Pepy6_008, Perkunas_9, Petito_8, Phepper_11, Pherobrine_8, PherryCruz_1, Poco6_010, Popy_1, Rainydai_1, RavenPuff_1, Regigigas_1, Rickmore_10, Rima_1, Roney_7, RosaAsantewaa_1, Runhaar_11, Scap1_1, Schwartz33_11, Secretariat_7, SendtCS_1, Soshi_1, Spectropatronm_1, TaidaOne_1, Talon44_8, Tanis_7, TenaciousP_11, Thiqqums_1, TieDye_1, TonyStarch_1, Trufflozitus_7, Untouchable_10, Vardy_11, Zeph_10,

Genes that have the "Most Annotated" start but do not call it:

- GoblinVoyage_1, Hortihabitatio_10, HotFries_1, SheRa_1,

Genes that do not have the "Most Annotated" start:

- Acai_1, AddiRose_6, Arcadia_3, AreFloNak_1, Argan_1, Arzan_3, BarbieDoll_2, BenitoAntonio_3, Benllo_2, Biscute_1, Boog_2, Bouchard_1, Bowling_2, Breylor17_1, BronxBay_2, Brunswick_1, Camille_6, CapnMurica_2, CastorTray_2, Caterpillar_2, Cheesy_3, Chlochlo_1, Circum_3, Correa_3, Daddyjeff_6, Damascus_6, Darby_1, DevitoJr_1, DizzyRudy_6, Djungelskog_2, DoctorPepper_2, Dynamite_3, Eevee_5, Egad_2, ElephantMan_1, Elsa_3, Elver_5, Gandionco_5, GantcherGoblin_1, Giantsbane_1, GoCrazy_2, Gordon_1, Hankly_2, Heisenberger_3, HerbBucket_2, Ingrid_1, Inked_2, Issa_1, JEGGS_3, Jazzy4900_4, JoyLin_5, Kardesai_2, KeaneyLin_2, KevinMinion_1, Kinny_2, Leahea_2, Lewando_2, LilHuddy_1, Linda_2, Loretta_1, LucySwiss_1, Makai_1, MediumFry_2, Michelle_2, MiniBagel_2, Mooshroom_3, MrAaronian_2, Mudcat_3, NapoleonB_3, Nason_3, Natasha_1, Navi1117_2, Nightmare_1, Niktson_1, Nivinsha_1, Paella_6, Phaby_1, Phaila_2, Pippin15_5, PowellDog_1, ProfFrink_2, Qui_6, Raunak_2, Renaldo_2, RustyBoy_1, Salk_2, ScienceWizSam_2, Serenabean_6, Shepard_1, Shiba_2, Sloopyjoe_2, Sporto_1, StarLord_2, Stayer_2, Sunny4976_3, Sweetclover_6, Synopsis_1, Tatanka_1, Teacup_2, Tenney120_2, Tenno_2, Tokki_1, Tribby_3, TrixiePhattel_2, Truckee_1, Trustiboi_1, Uzumaki_2, Xenomorph_2, Yotsuba_5, Zeina_2, Zippen_2,

Summary by start number:

Start 25:

- Found in 3 of 211 (1.4%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Arzan_3 (FI), Jazzy4900_4 (FI), Sunny4976_3 (FI),

Start 27:

- Found in 72 of 211 (34.1%) of genes in pham
- Manual Annotations of this start: 48 of 166
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Acai_1 (AU1), AreFloNak_1 (AU1), Argan_1 (AU6), BarbieDoll_2 (AU6), Biscute_1 (AU6), Boog_2 (AW), Bouchard_1 (AU2), Breylor17_1 (AU1), BronxBay_2 (AW), Brunswick_1 (AU1), CapnMurica_2

(AU1), CastorTray_2 (AU1), Caterpillar_2 (AU4), Chlochlo_1 (AU2), Darby_1 (AU1), DevitoJr_1 (AU1), Djungelskog_2 (AW), DoctorPepper_2 (AW), Egad_2 (AW), ElephantMan_1 (AU1), GantcherGoblin_1 (AU6), Giantsbane_1 (AU2), Gordon_1 (AU1), HerbBucket_2 (AW), Ingrid_1 (AU3), Inked_2 (AU), Issa_1 (AU1), KevinMinion_1 (AU6), Kinny_2 (AU6), Leathe_2 (AU6), Lewando_2 (AU6), LilHuddy_1 (AU2), Linda_2 (AW), Loretta_1 (AU3), LucySwiss_1 (AU1), Makai_1 (AU5), MediumFry_2 (AU4), Michelle_2 (AW), MiniBagel_2 (AU1), MrAaronian_2 (AW), Natasha_1 (AW), Navi1117_2 (AU6), Nightmare_1 (AU1), Niktson_1 (AU1), Nivinsha_1 (AU1), Phaby_1 (AU2), Phaila_2 (AU6), Powelldog_1 (AW), ProfFrink_2 (AW), Raunak_2 (AW), Renaldo_2 (AU6), RustyBoy_1 (AW), Salk_2 (AW), ScienceWizSam_2 (AU1), Shepard_1 (AU2), Shiba_2 (AW), Sloopyjoe_2 (AW), Sporto_1 (AW), StarLord_2 (AW), Stayer_2 (AW), Synopsis_1 (AU1), Tatanka_1 (AU1), Teacup_2 (AU1), Tenney120_2 (AU6), Tenno_2 (AU1), Tokki_1 (AU2), TrixiePhattel_2 (AU6), Truckee_1 (AU5), Trustiboi_1 (AU1), Uzumaki_2 (AU6), Zeina_2 (AU6), Zippen_2 (AU3),

Start 31:

- Found in 21 of 211 (10.0%) of genes in pham
- Manual Annotations of this start: 19 of 166
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Arcadia_3 (AM), BenitoAntonio_3 (AM), Benllo_2 (AM), Bowling_2 (AM), Cheesy_3 (AM), Circum_3 (AM), Correa_3 (AM), Dynamite_3 (AM), Elsa_3 (AM), GoCrazy_2 (AM), Hankly_2 (AM), Heisenberger_3 (AM), JEGGS_3 (AM), Kardesai_2 (AM), KeaneyLin_2 (AM), Mooshroom_3 (AM), Mudcat_3 (AM), NapoleonB_3 (AM), Nason_3 (AM), Tribby_3 (AM), Xenomorph_2 (AM),

Start 33:

- Found in 100 of 211 (47.4%) of genes in pham
- Manual Annotations of this start: 84 of 166
- Called 96.0% of time when present
- Phage (with cluster) where this start called: Aflac_11 (DJ), AlainaMarie_11 (DJ), Annihilus_1 (BI2), Artorias_7 (DJ), Avazak_7 (DJ), Bilo_1 (BI2), Bing_1 (BI5), BluerMoon_11 (DJ), Burley_11 (DJ), Captrips_7 (DJ), CherryBlossom_1 (BI1), Chickenjars_11 (DJ), Citrus_10 (DJ), ClubPenguin_1 (BI7), Conley_7 (DJ), CricKo_1 (BI4), Crocheter_10 (DJ), Dancer_7 (DJ), Doxi13_1 (BI2), DrGrey_1 (BI1), Duffington_11 (DJ), Eddiemania_10 (DJ), EndAve_11 (DJ), Esketit_1 (BI1), Fazel_8 (DJ), FidgetOrca_1 (BI1), Figliar_11 (DJ), FortCran_7 (DJ), FrodoSwaggins_1 (BI1), FromIndy_1 (BI4), Gill_7 (DJ), GirlPower_1 (BI1), Gravy_7 (DJ), HazuAndZazu_1 (BI1), Hoshi_1 (BI1), Hydrus_10 (DJ), IceWarrior_1 (BI1), Indigenous_1 (BI1), Jaylociraptor_1 (BI1), Jodelie19_11 (DJ), JulesRay_7 (DJ), Kardashian_1 (BI6), Kenosha_8 (DJ), Kerry_7 (DJ), LibertyBell_1 (BI3), Madamoto_1 (BI1), Madvan_11 (DJ), Magel_7 (DJ), MajinBuu_12 (DJ), Maya_1 (BI1), Meibysrarus_1 (BI1), Miek_1 (BI4), Moozy_1 (BI2), Mossy_8 (DJ), Mysticmoon_8 (DJ), Nadmeg_11 (DJ), Namu_1 (BI1), Nithya_11 (DJ), NoPickles_7 (DJ), Odesza_7 (DJ), OhMyWard_11 (DJ), OlgasClover_11 (DJ), OlympicHelado_1 (BI1), Pepy6_008 (CC), Perkunas_9 (DJ), Petite_8 (DJ), Phepper_11 (DJ), Pherobrine_8 (DJ), PherryCruz_1 (BI2), Poco6_010 (CC), Popy_1 (BI1), Rainydai_1 (BI4), RavenPuff_1 (BI2), Regigigas_1 (BI4), Rickmore_10 (DJ), Rima_1 (BI1), Roney_7 (DJ), RosaAsantewaa_1 (BI2), Runhaar_11 (DJ), Scap1_1 (BI2), Schwartz33_11 (DJ), Secretariat_7 (DJ), SendItCS_1 (BI4), Soshi_1 (BI1), Spectropatronm_1 (BI1), TaidaOne_1 (BI1), Talon44_8 (DJ), Tanis_7 (DJ), TenaciousP_11 (DJ), Thiqqums_1 (BI4), TieDye_1 (BI1), TonyStarch_1 (BI1), Trufflozitus_7 (DJ), Untouchable_10 (DJ), Vardy_11 (DJ),

Zeph_10 (DJ),

Start 34:

- Found in 8 of 211 (3.8%) of genes in pham
- Manual Annotations of this start: 7 of 166
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AddiRose_6 (JA), Daddyjeff_6 (JA), Eevee_5 (JA), JoyLin_5 (JA), Pippin15_5 (JA), Serenabean_6 (JA), Sweetclover_6 (JA), Yotsuba_5 (JA),

Start 35:

- Found in 4 of 211 (1.9%) of genes in pham
- Manual Annotations of this start: 2 of 166
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Elver_5 (FK), Gandionco_5 (FK), Paella_6 (FK), Qui_6 (FK),

Start 36:

- Found in 3 of 211 (1.4%) of genes in pham
- Manual Annotations of this start: 3 of 166
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Camille_6 (EL), Damascus_6 (EL), DizzyRudy_6 (EL),

Start 43:

- Found in 18 of 211 (8.5%) of genes in pham
- Manual Annotations of this start: 3 of 166
- Called 16.7% of time when present
- Phage (with cluster) where this start called: GoblinVoyage_1 (BI2), HotFries_1 (BI2), SheRa_1 (BI2),

Start 47:

- Found in 4 of 211 (1.9%) of genes in pham
- No Manual Annotations of this start.
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Hortihabitatio_10 (DJ),

Summary by clusters:

There are 22 clusters represented in this pham: DJ, FI, FK, JA, AU1, AU3, AU2, AU5, AU4, AU6, EL, CC, AM, AU, AW, BI6, BI7, BI4, BI5, BI2, BI3, BI1,

Info for manual annotations of cluster AM:

- Start number 31 was manually annotated 19 times for cluster AM.

Info for manual annotations of cluster AU:

- Start number 27 was manually annotated 1 time for cluster AU.

Info for manual annotations of cluster AU1:

- Start number 27 was manually annotated 17 times for cluster AU1.

Info for manual annotations of cluster AU2:

- Start number 27 was manually annotated 5 times for cluster AU2.

Info for manual annotations of cluster AU3:

- Start number 27 was manually annotated 2 times for cluster AU3.

Info for manual annotations of cluster AU4:

- Start number 27 was manually annotated 2 times for cluster AU4.

Info for manual annotations of cluster AU5:

- Start number 27 was manually annotated 2 times for cluster AU5.

Info for manual annotations of cluster AU6:

- Start number 27 was manually annotated 5 times for cluster AU6.

Info for manual annotations of cluster AW:

- Start number 27 was manually annotated 14 times for cluster AW.

Info for manual annotations of cluster BI1:

- Start number 33 was manually annotated 23 times for cluster BI1.

Info for manual annotations of cluster BI2:

- Start number 33 was manually annotated 8 times for cluster BI2.
- Start number 43 was manually annotated 3 times for cluster BI2.

Info for manual annotations of cluster BI3:

- Start number 33 was manually annotated 1 time for cluster BI3.

Info for manual annotations of cluster BI4:

- Start number 33 was manually annotated 5 times for cluster BI4.

Info for manual annotations of cluster BI5:

- Start number 33 was manually annotated 1 time for cluster BI5.

Info for manual annotations of cluster BI6:

- Start number 33 was manually annotated 1 time for cluster BI6.

Info for manual annotations of cluster BI7:

- Start number 33 was manually annotated 1 time for cluster BI7.

Info for manual annotations of cluster DJ:

- Start number 33 was manually annotated 44 times for cluster DJ.

Info for manual annotations of cluster EL:

- Start number 36 was manually annotated 3 times for cluster EL.

Info for manual annotations of cluster FK:

- Start number 35 was manually annotated 2 times for cluster FK.

Info for manual annotations of cluster JA:

- Start number 34 was manually annotated 7 times for cluster JA.

Gene Information:

Gene: Acai_1 Start: 760, Stop: 1128, Start Num: 27

Candidate Starts for Acai_1:

(Start: 27 @760 has 48 MA's), (55, 958), (58, 979), (65, 1036), (71, 1078), (72, 1087),

Gene: AddiRose_6 Start: 2618, Stop: 2962, Start Num: 34

Candidate Starts for AddiRose_6:

(Start: 34 @2618 has 7 MA's), (53, 2768), (71, 2903),

Gene: Aflac_11 Start: 5884, Stop: 6237, Start Num: 33

Candidate Starts for Aflac_11:

(Start: 33 @5884 has 84 MA's), (48, 5986), (62, 6103), (65, 6127), (70, 6163), (72, 6178), (76, 6211),

Gene: AlainaMarie_11 Start: 5875, Stop: 6228, Start Num: 33

Candidate Starts for AlainaMarie_11:

(Start: 33 @5875 has 84 MA's), (48, 5977), (51, 6019), (62, 6094), (65, 6118), (70, 6154), (72, 6169), (76, 6202),

Gene: Annihilus_1 Start: 137, Stop: 490, Start Num: 33

Candidate Starts for Annihilus_1:

(Start: 33 @137 has 84 MA's), (Start: 43 @221 has 3 MA's), (64, 368), (65, 383), (71, 425),

Gene: Arcadia_3 Start: 1126, Stop: 1473, Start Num: 31

Candidate Starts for Arcadia_3:

(28, 1117), (Start: 31 @1126 has 19 MA's), (56, 1300), (72, 1426),

Gene: AreFloNak_1 Start: 623, Stop: 991, Start Num: 27

Candidate Starts for AreFloNak_1:

(Start: 27 @623 has 48 MA's), (55, 821), (65, 899), (68, 926), (71, 941), (72, 950),

Gene: Argan_1 Start: 438, Stop: 815, Start Num: 27

Candidate Starts for Argan_1:

(24, 429), (Start: 27 @438 has 48 MA's), (55, 639), (65, 717), (68, 744), (72, 768), (73, 792),

Gene: Artorias_7 Start: 3034, Stop: 3399, Start Num: 33

Candidate Starts for Artorias_7:

(Start: 33 @3034 has 84 MA's), (48, 3139), (51, 3181), (54, 3196), (65, 3280), (72, 3331), (76, 3364),

Gene: Arzan_3 Start: 1155, Stop: 1553, Start Num: 25

Candidate Starts for Arzan_3:

(25, 1155), (Start: 43 @1293 has 3 MA's), (46, 1302), (66, 1473), (71, 1497), (72, 1506),

Gene: Avazak_7 Start: 3034, Stop: 3390, Start Num: 33

Candidate Starts for Avazak_7:

(Start: 33 @3034 has 84 MA's), (51, 3181), (54, 3196), (65, 3280), (72, 3331), (76, 3364),

Gene: BarbieDoll_2 Start: 734, Stop: 1111, Start Num: 27

Candidate Starts for BarbieDoll_2:

(22, 710), (24, 725), (Start: 27 @734 has 48 MA's), (37, 779), (55, 935), (65, 1013), (68, 1040), (72, 1064),

Gene: BenitoAntonio_3 Start: 734, Stop: 1081, Start Num: 31

Candidate Starts for BenitoAntonio_3:
(28, 725), (Start: 31 @734 has 19 MA's), (56, 908), (72, 1034),

Gene: Benllo_2 Start: 736, Stop: 1083, Start Num: 31
Candidate Starts for Benllo_2:
(28, 727), (Start: 31 @736 has 19 MA's), (56, 910), (72, 1036),

Gene: Bilo_1 Start: 137, Stop: 490, Start Num: 33
Candidate Starts for Bilo_1:
(Start: 33 @137 has 84 MA's), (Start: 43 @221 has 3 MA's), (64, 368), (65, 383), (71, 425),

Gene: Bing_1 Start: 158, Stop: 502, Start Num: 33
Candidate Starts for Bing_1:
(29, 149), (Start: 33 @158 has 84 MA's), (47, 257), (72, 455),

Gene: Biscute_1 Start: 430, Stop: 807, Start Num: 27
Candidate Starts for Biscute_1:
(6, 277), (8, 283), (12, 334), (22, 406), (24, 421), (Start: 27 @430 has 48 MA's), (37, 475), (55, 631),
(62, 685), (65, 709), (68, 736), (72, 760),

Gene: BluerMoon_11 Start: 5878, Stop: 6231, Start Num: 33
Candidate Starts for BluerMoon_11:
(Start: 33 @5878 has 84 MA's), (48, 5980), (62, 6097), (65, 6121), (70, 6157), (72, 6172), (76, 6205),

Gene: Boog_2 Start: 630, Stop: 1022, Start Num: 27
Candidate Starts for Boog_2:
(20, 576), (21, 585), (Start: 27 @630 has 48 MA's), (45, 759), (51, 816), (54, 831), (72, 966),

Gene: Bouchard_1 Start: 604, Stop: 975, Start Num: 27
Candidate Starts for Bouchard_1:
(Start: 27 @604 has 48 MA's), (55, 802), (65, 880), (71, 922), (72, 931),

Gene: Bowling_2 Start: 736, Stop: 1083, Start Num: 31
Candidate Starts for Bowling_2:
(28, 727), (Start: 31 @736 has 19 MA's), (56, 910), (72, 1036),

Gene: Breylor17_1 Start: 748, Stop: 1116, Start Num: 27
Candidate Starts for Breylor17_1:
(Start: 27 @748 has 48 MA's), (55, 946), (65, 1024), (71, 1066), (72, 1075),

Gene: BronxBay_2 Start: 629, Stop: 1021, Start Num: 27
Candidate Starts for BronxBay_2:
(20, 575), (21, 584), (Start: 27 @629 has 48 MA's), (45, 758), (51, 815), (54, 830), (72, 965),

Gene: Brunswick_1 Start: 757, Stop: 1125, Start Num: 27
Candidate Starts for Brunswick_1:
(Start: 27 @757 has 48 MA's), (55, 955), (65, 1033), (71, 1075), (72, 1084),

Gene: Burley_11 Start: 5675, Stop: 6028, Start Num: 33
Candidate Starts for Burley_11:
(Start: 33 @5675 has 84 MA's), (48, 5777), (51, 5819), (62, 5894), (65, 5918), (70, 5954), (72, 5969),
(76, 6002),

Gene: Camille_6 Start: 2268, Stop: 2615, Start Num: 36
Candidate Starts for Camille_6:
(Start: 36 @2268 has 3 MA's), (59, 2460), (66, 2529), (71, 2553),

Gene: CapnMurica_2 Start: 2000, Stop: 2368, Start Num: 27
Candidate Starts for CapnMurica_2:
(Start: 27 @2000 has 48 MA's), (55, 2198), (65, 2276), (71, 2318), (72, 2327),

Gene: Captrips_7 Start: 3034, Stop: 3390, Start Num: 33
Candidate Starts for Captrips_7:
(Start: 33 @3034 has 84 MA's), (51, 3181), (54, 3196), (65, 3280), (72, 3331), (76, 3364),

Gene: CastorTray_2 Start: 602, Stop: 970, Start Num: 27
Candidate Starts for CastorTray_2:
(Start: 27 @602 has 48 MA's), (55, 800), (65, 878), (68, 905), (71, 920), (72, 929),

Gene: Caterpillar_2 Start: 831, Stop: 1199, Start Num: 27
Candidate Starts for Caterpillar_2:
(Start: 27 @831 has 48 MA's), (55, 1029), (65, 1107), (71, 1149), (72, 1158),

Gene: Cheesy_3 Start: 736, Stop: 1083, Start Num: 31
Candidate Starts for Cheesy_3:
(28, 727), (Start: 31 @736 has 19 MA's), (56, 910), (72, 1036),

Gene: CherryBlossom_1 Start: 148, Stop: 492, Start Num: 33
Candidate Starts for CherryBlossom_1:
(29, 139), (Start: 33 @148 has 84 MA's), (44, 235), (50, 268), (51, 295), (72, 445),

Gene: Chikenjars_11 Start: 5875, Stop: 6228, Start Num: 33
Candidate Starts for Chikenjars_11:
(Start: 33 @5875 has 84 MA's), (48, 5977), (51, 6019), (62, 6094), (65, 6118), (70, 6154), (72, 6169),
(76, 6202),

Gene: Chlochlo_1 Start: 605, Stop: 976, Start Num: 27
Candidate Starts for Chlochlo_1:
(Start: 27 @605 has 48 MA's), (55, 803), (65, 881), (71, 923), (72, 932),

Gene: Circum_3 Start: 736, Stop: 1083, Start Num: 31
Candidate Starts for Circum_3:
(28, 727), (Start: 31 @736 has 19 MA's), (56, 910), (72, 1036),

Gene: Citrus_10 Start: 5882, Stop: 6235, Start Num: 33
Candidate Starts for Citrus_10:
(Start: 33 @5882 has 84 MA's), (48, 5984), (51, 6026), (62, 6101), (65, 6125), (70, 6161), (72, 6176),
(76, 6209),

Gene: ClubPenguin_1 Start: 106, Stop: 462, Start Num: 33
Candidate Starts for ClubPenguin_1:
(Start: 33 @106 has 84 MA's), (Start: 43 @190 has 3 MA's), (46, 199), (49, 214), (66, 370), (72, 403),

Gene: Conley_7 Start: 3062, Stop: 3418, Start Num: 33
Candidate Starts for Conley_7:
(Start: 33 @3062 has 84 MA's), (48, 3167), (51, 3209), (54, 3224), (65, 3308), (72, 3359), (76, 3392),

Gene: Correa_3 Start: 736, Stop: 1083, Start Num: 31
Candidate Starts for Correa_3:
(28, 727), (Start: 31 @736 has 19 MA's), (56, 910), (72, 1036),

Gene: CricKo_1 Start: 190, Stop: 537, Start Num: 33
Candidate Starts for CricKo_1:
(Start: 33 @190 has 84 MA's), (50, 310), (51, 337), (65, 436), (68, 463), (72, 487),

Gene: Crocheter_10 Start: 4602, Stop: 4955, Start Num: 33
Candidate Starts for Crocheter_10:
(Start: 33 @4602 has 84 MA's), (48, 4704), (65, 4845), (70, 4881), (72, 4896), (76, 4929),

Gene: Daddyjeff_6 Start: 2617, Stop: 2961, Start Num: 34
Candidate Starts for Daddyjeff_6:
(Start: 34 @2617 has 7 MA's), (53, 2767), (71, 2902),

Gene: Damascus_6 Start: 2267, Stop: 2611, Start Num: 36
Candidate Starts for Damascus_6:
(Start: 36 @2267 has 3 MA's), (39, 2285), (Start: 43 @2348 has 3 MA's), (51, 2411), (66, 2528), (69, 2540), (71, 2552),

Gene: Dancer_7 Start: 2740, Stop: 3105, Start Num: 33
Candidate Starts for Dancer_7:
(Start: 33 @2740 has 84 MA's), (48, 2845), (51, 2887), (54, 2902), (65, 2986), (72, 3037), (76, 3070),

Gene: Darby_1 Start: 605, Stop: 973, Start Num: 27
Candidate Starts for Darby_1:
(Start: 27 @605 has 48 MA's), (55, 803), (65, 881), (71, 923), (72, 932),

Gene: DevitoJr_1 Start: 747, Stop: 1115, Start Num: 27
Candidate Starts for DevitoJr_1:
(Start: 27 @747 has 48 MA's), (55, 945), (65, 1023), (71, 1065), (72, 1074),

Gene: DizzyRudy_6 Start: 2265, Stop: 2609, Start Num: 36
Candidate Starts for DizzyRudy_6:
(Start: 36 @2265 has 3 MA's), (39, 2283), (Start: 43 @2346 has 3 MA's), (51, 2409), (66, 2526), (69, 2538), (71, 2550),

Gene: Djungelskog_2 Start: 629, Stop: 1021, Start Num: 27
Candidate Starts for Djungelskog_2:
(20, 575), (21, 584), (Start: 27 @629 has 48 MA's), (45, 758), (51, 815), (54, 830), (72, 965),

Gene: DoctorPepper_2 Start: 629, Stop: 1021, Start Num: 27
Candidate Starts for DoctorPepper_2:
(20, 575), (21, 584), (Start: 27 @629 has 48 MA's), (45, 758), (51, 815), (54, 830), (72, 965),

Gene: Doxi13_1 Start: 137, Stop: 490, Start Num: 33
Candidate Starts for Doxi13_1:
(Start: 33 @137 has 84 MA's), (Start: 43 @221 has 3 MA's), (64, 368), (65, 383), (71, 425),

Gene: DrGrey_1 Start: 148, Stop: 492, Start Num: 33
Candidate Starts for DrGrey_1:

(29, 139), (Start: 33 @148 has 84 MA's), (44, 235), (50, 268), (51, 295), (72, 445),

Gene: Duffington_11 Start: 5860, Stop: 6213, Start Num: 33

Candidate Starts for Duffington_11:

(Start: 33 @5860 has 84 MA's), (48, 5962), (51, 6004), (62, 6079), (65, 6103), (70, 6139), (72, 6154), (76, 6187),

Gene: Dynamite_3 Start: 736, Stop: 1083, Start Num: 31

Candidate Starts for Dynamite_3:

(28, 727), (Start: 31 @736 has 19 MA's), (56, 910), (72, 1036),

Gene: Eddiemania_10 Start: 5067, Stop: 5420, Start Num: 33

Candidate Starts for Eddiemania_10:

(Start: 33 @5067 has 84 MA's), (48, 5169), (62, 5286), (65, 5310), (70, 5346), (72, 5361), (76, 5394),

Gene: Eevee_5 Start: 2151, Stop: 2507, Start Num: 34

Candidate Starts for Eevee_5:

(11, 1998), (19, 2049), (30, 2139), (32, 2145), (Start: 34 @2151 has 7 MA's), (59, 2349), (67, 2421), (71, 2442),

Gene: Egad_2 Start: 630, Stop: 1022, Start Num: 27

Candidate Starts for Egad_2:

(20, 576), (21, 585), (Start: 27 @630 has 48 MA's), (45, 759), (51, 816), (54, 831), (72, 966),

Gene: ElephantMan_1 Start: 760, Stop: 1128, Start Num: 27

Candidate Starts for ElephantMan_1:

(Start: 27 @760 has 48 MA's), (55, 958), (65, 1036), (71, 1078), (72, 1087),

Gene: Elsa_3 Start: 1126, Stop: 1473, Start Num: 31

Candidate Starts for Elsa_3:

(28, 1117), (Start: 31 @1126 has 19 MA's), (56, 1300), (72, 1426),

Gene: Elver_5 Start: 1902, Stop: 2240, Start Num: 35

Candidate Starts for Elver_5:

(Start: 35 @1902 has 2 MA's), (50, 2019), (55, 2067), (65, 2145), (68, 2172), (72, 2196),

Gene: EndAve_11 Start: 5875, Stop: 6228, Start Num: 33

Candidate Starts for EndAve_11:

(Start: 33 @5875 has 84 MA's), (48, 5977), (51, 6019), (62, 6094), (65, 6118), (70, 6154), (72, 6169), (76, 6202),

Gene: Esketit_1 Start: 148, Stop: 492, Start Num: 33

Candidate Starts for Esketit_1:

(29, 139), (Start: 33 @148 has 84 MA's), (44, 235), (50, 268), (51, 295), (72, 445),

Gene: Fazel_8 Start: 4607, Stop: 4963, Start Num: 33

Candidate Starts for Fazel_8:

(Start: 33 @4607 has 84 MA's), (48, 4712), (65, 4853), (72, 4904), (74, 4931),

Gene: FidgetOrca_1 Start: 148, Stop: 492, Start Num: 33

Candidate Starts for FidgetOrca_1:

(29, 139), (Start: 33 @148 has 84 MA's), (44, 235), (50, 268), (51, 295), (72, 445),

Gene: Figliar_11 Start: 5884, Stop: 6237, Start Num: 33
Candidate Starts for Figliar_11:
(Start: 33 @5884 has 84 MA's), (48, 5986), (62, 6103), (65, 6127), (70, 6163), (72, 6178), (76, 6211),

Gene: FortCran_7 Start: 3034, Stop: 3399, Start Num: 33
Candidate Starts for FortCran_7:
(Start: 33 @3034 has 84 MA's), (48, 3139), (51, 3181), (54, 3196), (65, 3280), (72, 3331), (76, 3364),

Gene: FrodoSwaggins_1 Start: 148, Stop: 492, Start Num: 33
Candidate Starts for FrodoSwaggins_1:
(29, 139), (Start: 33 @148 has 84 MA's), (44, 235), (50, 268), (51, 295), (72, 445),

Gene: FromIndy_1 Start: 190, Stop: 537, Start Num: 33
Candidate Starts for FromIndy_1:
(Start: 33 @190 has 84 MA's), (50, 310), (51, 337), (65, 436), (68, 463), (72, 487),

Gene: Gandionco_5 Start: 1901, Stop: 2239, Start Num: 35
Candidate Starts for Gandionco_5:
(Start: 35 @1901 has 2 MA's), (50, 2018), (55, 2066), (65, 2144), (68, 2171), (72, 2195),

Gene: GantcherGoblin_1 Start: 438, Stop: 815, Start Num: 27
Candidate Starts for GantcherGoblin_1:
(24, 429), (Start: 27 @438 has 48 MA's), (55, 639), (65, 717), (68, 744), (72, 768), (73, 792),

Gene: Giantsbane_1 Start: 605, Stop: 976, Start Num: 27
Candidate Starts for Giantsbane_1:
(Start: 27 @605 has 48 MA's), (55, 803), (65, 881), (71, 923), (72, 932),

Gene: Gill_7 Start: 2747, Stop: 3103, Start Num: 33
Candidate Starts for Gill_7:
(Start: 33 @2747 has 84 MA's), (48, 2852), (51, 2894), (54, 2909), (65, 2993), (72, 3044), (76, 3077),

Gene: GirlPower_1 Start: 1005, Stop: 1355, Start Num: 33
Candidate Starts for GirlPower_1:
(29, 996), (Start: 33 @1005 has 84 MA's), (50, 1125), (51, 1152), (57, 1191), (64, 1236), (72, 1302),

Gene: GoCrazy_2 Start: 736, Stop: 1083, Start Num: 31
Candidate Starts for GoCrazy_2:
(28, 727), (Start: 31 @736 has 19 MA's), (56, 910), (72, 1036),

Gene: GoblinVoyage_1 Start: 221, Stop: 490, Start Num: 43
Candidate Starts for GoblinVoyage_1:
(Start: 33 @137 has 84 MA's), (Start: 43 @221 has 3 MA's), (64, 368), (65, 383), (71, 425),

Gene: Gordon_1 Start: 601, Stop: 969, Start Num: 27
Candidate Starts for Gordon_1:
(Start: 27 @601 has 48 MA's), (55, 799), (65, 877), (71, 919), (72, 928),

Gene: Gravy_7 Start: 2747, Stop: 3103, Start Num: 33
Candidate Starts for Gravy_7:
(Start: 33 @2747 has 84 MA's), (48, 2852), (51, 2894), (54, 2909), (65, 2993), (72, 3044), (76, 3077),

Gene: Hankly_2 Start: 736, Stop: 1083, Start Num: 31

Candidate Starts for Hankly_2:

(28, 727), (Start: 31 @736 has 19 MA's), (56, 910), (72, 1036),

Gene: HazuAndZazu_1 Start: 148, Stop: 492, Start Num: 33

Candidate Starts for HazuAndZazu_1:

(29, 139), (Start: 33 @148 has 84 MA's), (44, 235), (50, 268), (51, 295), (72, 445),

Gene: Heisenberger_3 Start: 736, Stop: 1083, Start Num: 31

Candidate Starts for Heisenberger_3:

(28, 727), (Start: 31 @736 has 19 MA's), (56, 910), (72, 1036),

Gene: HerbBucket_2 Start: 630, Stop: 1022, Start Num: 27

Candidate Starts for HerbBucket_2:

(20, 576), (21, 585), (Start: 27 @630 has 48 MA's), (45, 759), (51, 816), (54, 831), (72, 966),

Gene: Hortihabitatio_10 Start: 5062, Stop: 5319, Start Num: 47

Candidate Starts for Hortihabitatio_10:

(Start: 33 @4963 has 84 MA's), (47, 5062), (48, 5068), (65, 5209), (72, 5260), (74, 5287),

Gene: Hoshi_1 Start: 148, Stop: 492, Start Num: 33

Candidate Starts for Hoshi_1:

(29, 139), (Start: 33 @148 has 84 MA's), (44, 235), (50, 268), (51, 295), (72, 445),

Gene: HotFries_1 Start: 221, Stop: 490, Start Num: 43

Candidate Starts for HotFries_1:

(Start: 33 @137 has 84 MA's), (Start: 43 @221 has 3 MA's), (64, 368), (65, 383), (71, 425),

Gene: Hydrus_10 Start: 4860, Stop: 5213, Start Num: 33

Candidate Starts for Hydrus_10:

(Start: 33 @4860 has 84 MA's), (48, 4962), (62, 5079), (65, 5103), (70, 5139), (72, 5154), (76, 5187),

Gene: IceWarrior_1 Start: 148, Stop: 492, Start Num: 33

Candidate Starts for IceWarrior_1:

(29, 139), (Start: 33 @148 has 84 MA's), (44, 235), (50, 268), (51, 295), (72, 445),

Gene: Indigenous_1 Start: 148, Stop: 492, Start Num: 33

Candidate Starts for Indigenous_1:

(29, 139), (Start: 33 @148 has 84 MA's), (44, 235), (50, 268), (51, 295), (72, 445),

Gene: Ingrid_1 Start: 629, Stop: 997, Start Num: 27

Candidate Starts for Ingrid_1:

(Start: 27 @629 has 48 MA's), (55, 827), (65, 905), (71, 947), (72, 956),

Gene: Inked_2 Start: 866, Stop: 1234, Start Num: 27

Candidate Starts for Inked_2:

(Start: 27 @866 has 48 MA's), (55, 1064), (65, 1142), (71, 1184), (72, 1193),

Gene: Issa_1 Start: 748, Stop: 1116, Start Num: 27

Candidate Starts for Issa_1:

(Start: 27 @748 has 48 MA's), (55, 946), (65, 1024), (71, 1066), (72, 1075),

Gene: JEGGS_3 Start: 738, Stop: 1085, Start Num: 31

Candidate Starts for JEGGS_3:

(28, 729), (Start: 31 @738 has 19 MA's), (56, 912), (72, 1038),

Gene: Jaylociraptor_1 Start: 148, Stop: 492, Start Num: 33

Candidate Starts for Jaylociraptor_1:

(29, 139), (Start: 33 @148 has 84 MA's), (44, 235), (50, 268), (51, 295), (72, 445),

Gene: Jazzy4900_4 Start: 1181, Stop: 1579, Start Num: 25

Candidate Starts for Jazzy4900_4:

(25, 1181), (41, 1280), (Start: 43 @1319 has 3 MA's), (46, 1328), (66, 1499), (71, 1523), (72, 1532),

Gene: Jodelie19_11 Start: 5878, Stop: 6231, Start Num: 33

Candidate Starts for Jodelie19_11:

(Start: 33 @5878 has 84 MA's), (48, 5980), (62, 6097), (65, 6121), (70, 6157), (72, 6172), (76, 6205),

Gene: JoyLin_5 Start: 2151, Stop: 2507, Start Num: 34

Candidate Starts for JoyLin_5:

(11, 1998), (19, 2049), (30, 2139), (32, 2145), (Start: 34 @2151 has 7 MA's), (59, 2349), (67, 2421), (71, 2442),

Gene: JulesRay_7 Start: 3034, Stop: 3399, Start Num: 33

Candidate Starts for JulesRay_7:

(Start: 33 @3034 has 84 MA's), (48, 3139), (51, 3181), (54, 3196), (65, 3280), (72, 3331), (76, 3364),

Gene: Kardashian_1 Start: 221, Stop: 568, Start Num: 33

Candidate Starts for Kardashian_1:

(Start: 33 @221 has 84 MA's), (Start: 43 @305 has 3 MA's), (50, 341), (60, 425), (65, 467), (68, 494), (71, 509),

Gene: Kardesai_2 Start: 736, Stop: 1083, Start Num: 31

Candidate Starts for Kardesai_2:

(28, 727), (Start: 31 @736 has 19 MA's), (56, 910), (72, 1036),

Gene: KeaneyLin_2 Start: 736, Stop: 1083, Start Num: 31

Candidate Starts for KeaneyLin_2:

(28, 727), (Start: 31 @736 has 19 MA's), (56, 910), (72, 1036),

Gene: Kenosha_8 Start: 3461, Stop: 3814, Start Num: 33

Candidate Starts for Kenosha_8:

(Start: 33 @3461 has 84 MA's), (48, 3563), (65, 3704), (70, 3740), (72, 3755), (76, 3788),

Gene: Kerry_7 Start: 2747, Stop: 3103, Start Num: 33

Candidate Starts for Kerry_7:

(Start: 33 @2747 has 84 MA's), (48, 2852), (51, 2894), (54, 2909), (65, 2993), (72, 3044), (76, 3077),

Gene: KevinMinion_1 Start: 594, Stop: 971, Start Num: 27

Candidate Starts for KevinMinion_1:

(24, 585), (Start: 27 @594 has 48 MA's), (55, 795), (65, 873), (68, 900), (72, 924), (73, 948),

Gene: Kinny_2 Start: 734, Stop: 1111, Start Num: 27

Candidate Starts for Kinny_2:

(22, 710), (24, 725), (Start: 27 @734 has 48 MA's), (37, 779), (55, 935), (65, 1013), (68, 1040), (72, 1064),

Gene: Leathea_2 Start: 618, Stop: 1004, Start Num: 27

Candidate Starts for Leathea_2:

(24, 609), (Start: 27 @618 has 48 MA's), (55, 822), (65, 900), (68, 927), (72, 951),

Gene: Lewando_2 Start: 733, Stop: 1110, Start Num: 27

Candidate Starts for Lewando_2:

(22, 709), (23, 718), (24, 724), (Start: 27 @733 has 48 MA's), (37, 778), (55, 934), (65, 1012), (68, 1039), (72, 1063),

Gene: LibertyBell_1 Start: 158, Stop: 496, Start Num: 33

Candidate Starts for LibertyBell_1:

(26, 125), (Start: 33 @158 has 84 MA's), (Start: 43 @242 has 3 MA's), (50, 278), (51, 305), (65, 404), (71, 446), (75, 479),

Gene: LilHuddy_1 Start: 605, Stop: 976, Start Num: 27

Candidate Starts for LilHuddy_1:

(Start: 27 @605 has 48 MA's), (55, 803), (65, 881), (71, 923), (72, 932),

Gene: Linda_2 Start: 629, Stop: 1021, Start Num: 27

Candidate Starts for Linda_2:

(20, 575), (21, 584), (Start: 27 @629 has 48 MA's), (45, 758), (51, 815), (54, 830), (72, 965),

Gene: Loretta_1 Start: 629, Stop: 997, Start Num: 27

Candidate Starts for Loretta_1:

(Start: 27 @629 has 48 MA's), (55, 827), (65, 905), (71, 947), (72, 956),

Gene: LucySwiss_1 Start: 767, Stop: 1135, Start Num: 27

Candidate Starts for LucySwiss_1:

(Start: 27 @767 has 48 MA's), (55, 965), (65, 1043), (71, 1085), (72, 1094),

Gene: Madamoto_1 Start: 149, Stop: 493, Start Num: 33

Candidate Starts for Madamoto_1:

(29, 140), (Start: 33 @149 has 84 MA's), (38, 176), (50, 269), (72, 446),

Gene: Madvan_11 Start: 5675, Stop: 6028, Start Num: 33

Candidate Starts for Madvan_11:

(Start: 33 @5675 has 84 MA's), (48, 5777), (65, 5918), (70, 5954), (72, 5969), (76, 6002),

Gene: Magel_7 Start: 2747, Stop: 3103, Start Num: 33

Candidate Starts for Magel_7:

(Start: 33 @2747 has 84 MA's), (48, 2852), (51, 2894), (54, 2909), (65, 2993), (72, 3044), (76, 3077),

Gene: MajinBuu_12 Start: 5879, Stop: 6232, Start Num: 33

Candidate Starts for MajinBuu_12:

(Start: 33 @5879 has 84 MA's), (48, 5981), (62, 6098), (65, 6122), (70, 6158), (72, 6173), (76, 6206),

Gene: Makai_1 Start: 688, Stop: 1056, Start Num: 27

Candidate Starts for Makai_1:

(Start: 27 @688 has 48 MA's), (46, 811), (55, 886), (65, 964), (71, 1006), (72, 1015),

Gene: Maya_1 Start: 148, Stop: 492, Start Num: 33

Candidate Starts for Maya_1:

(29, 139), (Start: 33 @148 has 84 MA's), (44, 235), (50, 268), (51, 295), (72, 445),

Gene: MediumFry_2 Start: 860, Stop: 1228, Start Num: 27

Candidate Starts for MediumFry_2:

(Start: 27 @860 has 48 MA's), (55, 1058), (65, 1136), (71, 1178), (72, 1187),

Gene: Meibysrarus_1 Start: 148, Stop: 492, Start Num: 33

Candidate Starts for Meibysrarus_1:

(29, 139), (Start: 33 @148 has 84 MA's), (44, 235), (50, 268), (51, 295), (72, 445),

Gene: Michelle_2 Start: 629, Stop: 1021, Start Num: 27

Candidate Starts for Michelle_2:

(20, 575), (21, 584), (Start: 27 @629 has 48 MA's), (45, 758), (51, 815), (54, 830), (72, 965),

Gene: Miek_1 Start: 190, Stop: 537, Start Num: 33

Candidate Starts for Miek_1:

(Start: 33 @190 has 84 MA's), (50, 310), (51, 337), (65, 436), (68, 463), (72, 487),

Gene: MiniBagel_2 Start: 2000, Stop: 2368, Start Num: 27

Candidate Starts for MiniBagel_2:

(Start: 27 @2000 has 48 MA's), (55, 2198), (65, 2276), (71, 2318), (72, 2327),

Gene: Mooshroom_3 Start: 736, Stop: 1083, Start Num: 31

Candidate Starts for Mooshroom_3:

(28, 727), (Start: 31 @736 has 19 MA's), (56, 910), (72, 1036),

Gene: Moozy_1 Start: 137, Stop: 490, Start Num: 33

Candidate Starts for Moozy_1:

(Start: 33 @137 has 84 MA's), (Start: 43 @221 has 3 MA's), (64, 368), (65, 383), (71, 425),

Gene: Mossy_8 Start: 3734, Stop: 4090, Start Num: 33

Candidate Starts for Mossy_8:

(Start: 33 @3734 has 84 MA's), (48, 3839), (65, 3980), (72, 4031), (74, 4058), (76, 4064),

Gene: MrAaronian_2 Start: 629, Stop: 1021, Start Num: 27

Candidate Starts for MrAaronian_2:

(20, 575), (21, 584), (Start: 27 @629 has 48 MA's), (45, 758), (51, 815), (54, 830), (72, 965),

Gene: Mudcat_3 Start: 735, Stop: 1082, Start Num: 31

Candidate Starts for Mudcat_3:

(28, 726), (Start: 31 @735 has 19 MA's), (56, 909), (72, 1035),

Gene: Mysticmoon_8 Start: 3437, Stop: 3793, Start Num: 33

Candidate Starts for Mysticmoon_8:

(Start: 33 @3437 has 84 MA's), (47, 3536), (48, 3542), (65, 3683), (72, 3734), (74, 3761),

Gene: Nadmeg_11 Start: 5676, Stop: 6029, Start Num: 33

Candidate Starts for Nadmeg_11:

(Start: 33 @5676 has 84 MA's), (48, 5778), (51, 5820), (62, 5895), (65, 5919), (70, 5955), (72, 5970), (76, 6003),

Gene: Namo_1 Start: 148, Stop: 492, Start Num: 33

Candidate Starts for Namo_1:

(29, 139), (Start: 33 @148 has 84 MA's), (44, 235), (50, 268), (51, 295), (72, 445),

Gene: NapoleonB_3 Start: 736, Stop: 1083, Start Num: 31

Candidate Starts for NapoleonB_3:

(28, 727), (Start: 31 @736 has 19 MA's), (56, 910), (72, 1036),

Gene: Nason_3 Start: 1126, Stop: 1473, Start Num: 31

Candidate Starts for Nason_3:

(28, 1117), (Start: 31 @1126 has 19 MA's), (56, 1300), (72, 1426),

Gene: Natasha_1 Start: 606, Stop: 998, Start Num: 27

Candidate Starts for Natasha_1:

(2, 393), (3, 399), (4, 411), (5, 417), (7, 477), (9, 492), (16, 549), (Start: 27 @606 has 48 MA's), (48, 747), (51, 789), (54, 804), (61, 861), (72, 939),

Gene: Navi1117_2 Start: 833, Stop: 1210, Start Num: 27

Candidate Starts for Navi1117_2:

(24, 824), (Start: 27 @833 has 48 MA's), (55, 1034), (65, 1112), (68, 1139), (72, 1163), (73, 1187),

Gene: Nightmare_1 Start: 767, Stop: 1135, Start Num: 27

Candidate Starts for Nightmare_1:

(Start: 27 @767 has 48 MA's), (55, 965), (65, 1043), (71, 1085), (72, 1094),

Gene: Niktson_1 Start: 760, Stop: 1128, Start Num: 27

Candidate Starts for Niktson_1:

(Start: 27 @760 has 48 MA's), (55, 958), (65, 1036), (71, 1078), (72, 1087),

Gene: Nithya_11 Start: 5875, Stop: 6228, Start Num: 33

Candidate Starts for Nithya_11:

(Start: 33 @5875 has 84 MA's), (48, 5977), (51, 6019), (62, 6094), (65, 6118), (70, 6154), (72, 6169), (76, 6202),

Gene: Nivinsha_1 Start: 623, Stop: 991, Start Num: 27

Candidate Starts for Nivinsha_1:

(Start: 27 @623 has 48 MA's), (55, 821), (65, 899), (68, 926), (71, 941), (72, 950),

Gene: NoPickles_7 Start: 2747, Stop: 3103, Start Num: 33

Candidate Starts for NoPickles_7:

(Start: 33 @2747 has 84 MA's), (48, 2852), (51, 2894), (54, 2909), (65, 2993), (72, 3044), (76, 3077),

Gene: Odesza_7 Start: 2747, Stop: 3103, Start Num: 33

Candidate Starts for Odesza_7:

(Start: 33 @2747 has 84 MA's), (48, 2852), (51, 2894), (54, 2909), (65, 2993), (72, 3044), (76, 3077),

Gene: OhMyWard_11 Start: 5673, Stop: 6029, Start Num: 33

Candidate Starts for OhMyWard_11:

(Start: 33 @5673 has 84 MA's), (47, 5772), (48, 5778), (51, 5820), (52, 5823), (65, 5919), (72, 5970), (74, 5997), (76, 6003),

Gene: OlgasClover_11 Start: 5875, Stop: 6228, Start Num: 33

Candidate Starts for OlgasClover_11:

(Start: 33 @5875 has 84 MA's), (48, 5977), (62, 6094), (65, 6118), (70, 6154), (72, 6169), (76, 6202),

Gene: OlympicHelado_1 Start: 148, Stop: 492, Start Num: 33

Candidate Starts for OlympicHelado_1:
(29, 139), (Start: 33 @148 has 84 MA's), (44, 235), (50, 268), (51, 295), (72, 445),

Gene: Paella_6 Start: 1901, Stop: 2239, Start Num: 35
Candidate Starts for Paella_6:
(Start: 35 @1901 has 2 MA's), (50, 2018), (55, 2066), (65, 2144), (68, 2171), (72, 2195),

Gene: Pepy6_008 Start: 8195, Stop: 8551, Start Num: 33
Candidate Starts for Pepy6_008:
(Start: 33 @8195 has 84 MA's), (46, 8294), (54, 8363), (68, 8474), (72, 8498),

Gene: Perkunas_9 Start: 3558, Stop: 3914, Start Num: 33
Candidate Starts for Perkunas_9:
(Start: 33 @3558 has 84 MA's), (51, 3705), (54, 3720), (60, 3762), (65, 3804), (72, 3855), (76, 3888),

Gene: Petito_8 Start: 3256, Stop: 3612, Start Num: 33
Candidate Starts for Petito_8:
(Start: 33 @3256 has 84 MA's), (48, 3361), (51, 3403), (54, 3418), (65, 3502), (72, 3553), (76, 3586),

Gene: Phaby_1 Start: 604, Stop: 975, Start Num: 27
Candidate Starts for Phaby_1:
(Start: 27 @604 has 48 MA's), (55, 802), (65, 880), (68, 907), (71, 922), (72, 931),

Gene: Phaila_2 Start: 707, Stop: 1084, Start Num: 27
Candidate Starts for Phaila_2:
(24, 698), (Start: 27 @707 has 48 MA's), (55, 908), (65, 986), (68, 1013), (72, 1037), (73, 1061),

Gene: Phepper_11 Start: 5674, Stop: 6027, Start Num: 33
Candidate Starts for Phepper_11:
(Start: 33 @5674 has 84 MA's), (48, 5776), (62, 5893), (65, 5917), (70, 5953), (72, 5968), (76, 6001),

Gene: Pherobrine_8 Start: 3433, Stop: 3789, Start Num: 33
Candidate Starts for Pherobrine_8:
(Start: 33 @3433 has 84 MA's), (48, 3538), (58, 3622), (65, 3679), (70, 3715), (72, 3730), (76, 3763),

Gene: PherryCruz_1 Start: 137, Stop: 490, Start Num: 33
Candidate Starts for PherryCruz_1:
(Start: 33 @137 has 84 MA's), (Start: 43 @221 has 3 MA's), (64, 368), (65, 383), (71, 425),

Gene: Pippin15_5 Start: 2173, Stop: 2526, Start Num: 34
Candidate Starts for Pippin15_5:
(Start: 34 @2173 has 7 MA's), (67, 2440), (71, 2461),

Gene: POCO6_010 Start: 11626, Stop: 11982, Start Num: 33
Candidate Starts for POCO6_010:
(Start: 33 @11626 has 84 MA's), (46, 11725), (54, 11794), (68, 11905), (72, 11929),

Gene: Popy_1 Start: 148, Stop: 492, Start Num: 33
Candidate Starts for Popy_1:
(29, 139), (Start: 33 @148 has 84 MA's), (44, 235), (50, 268), (51, 295), (72, 445),

Gene: Powelldog_1 Start: 662, Stop: 1057, Start Num: 27
Candidate Starts for Powelldog_1:

(10, 569), (13, 587), (14, 593), (15, 602), (17, 608), (18, 620), (Start: 27 @662 has 48 MA's), (48, 806), (51, 848), (54, 863), (72, 998),

Gene: ProfFrink_2 Start: 629, Stop: 1021, Start Num: 27

Candidate Starts for ProfFrink_2:

(20, 575), (21, 584), (Start: 27 @629 has 48 MA's), (45, 758), (51, 815), (54, 830), (72, 965),

Gene: Qui_6 Start: 1901, Stop: 2239, Start Num: 35

Candidate Starts for Qui_6:

(Start: 35 @1901 has 2 MA's), (50, 2018), (55, 2066), (65, 2144), (68, 2171), (72, 2195),

Gene: Rainydai_1 Start: 190, Stop: 537, Start Num: 33

Candidate Starts for Rainydai_1:

(Start: 33 @190 has 84 MA's), (50, 310), (51, 337), (65, 436), (68, 463), (72, 487),

Gene: Raunak_2 Start: 629, Stop: 1021, Start Num: 27

Candidate Starts for Raunak_2:

(20, 575), (21, 584), (Start: 27 @629 has 48 MA's), (45, 758), (51, 815), (54, 830), (72, 965),

Gene: RavenPuff_1 Start: 137, Stop: 490, Start Num: 33

Candidate Starts for RavenPuff_1:

(Start: 33 @137 has 84 MA's), (Start: 43 @221 has 3 MA's), (64, 368), (65, 383), (71, 425),

Gene: Regigigas_1 Start: 190, Stop: 537, Start Num: 33

Candidate Starts for Regigigas_1:

(Start: 33 @190 has 84 MA's), (50, 310), (51, 337), (65, 436), (68, 463), (72, 487),

Gene: Renaldo_2 Start: 734, Stop: 1111, Start Num: 27

Candidate Starts for Renaldo_2:

(22, 710), (24, 725), (Start: 27 @734 has 48 MA's), (37, 779), (55, 935), (65, 1013), (68, 1040), (72, 1064),

Gene: Rickmore_10 Start: 4442, Stop: 4798, Start Num: 33

Candidate Starts for Rickmore_10:

(Start: 33 @4442 has 84 MA's), (48, 4547), (65, 4688), (70, 4724), (72, 4739),

Gene: Rima_1 Start: 148, Stop: 492, Start Num: 33

Candidate Starts for Rima_1:

(29, 139), (Start: 33 @148 has 84 MA's), (44, 235), (50, 268), (51, 295), (72, 445),

Gene: Roney_7 Start: 2747, Stop: 3103, Start Num: 33

Candidate Starts for Roney_7:

(Start: 33 @2747 has 84 MA's), (48, 2852), (51, 2894), (54, 2909), (65, 2993), (72, 3044), (76, 3077),

Gene: RosaAsantewaa_1 Start: 106, Stop: 459, Start Num: 33

Candidate Starts for RosaAsantewaa_1:

(Start: 33 @106 has 84 MA's), (40, 139), (72, 403),

Gene: Runhaar_11 Start: 5676, Stop: 6029, Start Num: 33

Candidate Starts for Runhaar_11:

(Start: 33 @5676 has 84 MA's), (48, 5778), (51, 5820), (62, 5895), (65, 5919), (70, 5955), (72, 5970), (76, 6003),

Gene: RustyBoy_1 Start: 606, Stop: 998, Start Num: 27

Candidate Starts for RustyBoy_1:

(2, 393), (3, 399), (4, 411), (5, 417), (7, 477), (16, 549), (Start: 27 @606 has 48 MA's), (37, 657), (48, 747), (51, 789), (54, 804), (72, 939),

Gene: Salk_2 Start: 629, Stop: 1021, Start Num: 27

Candidate Starts for Salk_2:

(20, 575), (21, 584), (Start: 27 @629 has 48 MA's), (45, 758), (51, 815), (54, 830), (72, 965),

Gene: Scap1_1 Start: 148, Stop: 501, Start Num: 33

Candidate Starts for Scap1_1:

(26, 115), (Start: 33 @148 has 84 MA's), (Start: 43 @232 has 3 MA's), (54, 310), (63, 373), (65, 394), (71, 436),

Gene: Schwartz33_11 Start: 5916, Stop: 6275, Start Num: 33

Candidate Starts for Schwartz33_11:

(Start: 33 @5916 has 84 MA's), (65, 6162), (72, 6213), (76, 6246),

Gene: ScienceWizSam_2 Start: 578, Stop: 946, Start Num: 27

Candidate Starts for ScienceWizSam_2:

(Start: 27 @578 has 48 MA's), (55, 776), (65, 854), (68, 881), (71, 896), (72, 905),

Gene: Secretariat_7 Start: 3519, Stop: 3875, Start Num: 33

Candidate Starts for Secretariat_7:

(Start: 33 @3519 has 84 MA's), (54, 3681), (65, 3765), (72, 3816), (76, 3849),

Gene: SendItCS_1 Start: 190, Stop: 537, Start Num: 33

Candidate Starts for SendItCS_1:

(Start: 33 @190 has 84 MA's), (50, 310), (51, 337), (65, 436), (68, 463), (72, 487),

Gene: Serenabean_6 Start: 2617, Stop: 2961, Start Num: 34

Candidate Starts for Serenabean_6:

(Start: 34 @2617 has 7 MA's), (53, 2767), (71, 2902),

Gene: SheRa_1 Start: 221, Stop: 490, Start Num: 43

Candidate Starts for SheRa_1:

(Start: 33 @137 has 84 MA's), (Start: 43 @221 has 3 MA's), (64, 368), (65, 383), (71, 425),

Gene: Shepard_1 Start: 605, Stop: 976, Start Num: 27

Candidate Starts for Shepard_1:

(Start: 27 @605 has 48 MA's), (55, 803), (65, 881), (71, 923), (72, 932),

Gene: Shiba_2 Start: 629, Stop: 1021, Start Num: 27

Candidate Starts for Shiba_2:

(20, 575), (21, 584), (Start: 27 @629 has 48 MA's), (45, 758), (51, 815), (54, 830), (72, 965),

Gene: Sloopyjoe_2 Start: 630, Stop: 1022, Start Num: 27

Candidate Starts for Sloopyjoe_2:

(20, 576), (21, 585), (Start: 27 @630 has 48 MA's), (45, 759), (51, 816), (54, 831), (72, 966),

Gene: Soshi_1 Start: 148, Stop: 492, Start Num: 33

Candidate Starts for Soshi_1:

(29, 139), (Start: 33 @148 has 84 MA's), (44, 235), (50, 268), (51, 295), (72, 445),

Gene: Spectropatronm_1 Start: 148, Stop: 492, Start Num: 33

Candidate Starts for Spectropatronm_1:

(29, 139), (Start: 33 @148 has 84 MA's), (44, 235), (50, 268), (51, 295), (72, 445),

Gene: Sporto_1 Start: 584, Stop: 976, Start Num: 27

Candidate Starts for Sporto_1:

(1, 332), (7, 455), (9, 470), (20, 551), (Start: 27 @584 has 48 MA's), (48, 725), (51, 767), (54, 782), (72, 917),

Gene: StarLord_2 Start: 630, Stop: 1022, Start Num: 27

Candidate Starts for StarLord_2:

(20, 576), (21, 585), (Start: 27 @630 has 48 MA's), (45, 759), (51, 816), (54, 831), (72, 966),

Gene: Stayer_2 Start: 629, Stop: 1021, Start Num: 27

Candidate Starts for Stayer_2:

(20, 575), (21, 584), (Start: 27 @629 has 48 MA's), (45, 758), (51, 815), (54, 830), (72, 965),

Gene: Sunny4976_3 Start: 1181, Stop: 1579, Start Num: 25

Candidate Starts for Sunny4976_3:

(25, 1181), (41, 1280), (Start: 43 @1319 has 3 MA's), (46, 1328), (66, 1499), (71, 1523), (72, 1532),

Gene: Sweetclover_6 Start: 2582, Stop: 2926, Start Num: 34

Candidate Starts for Sweetclover_6:

(Start: 34 @2582 has 7 MA's), (41, 2624), (42, 2657), (51, 2726), (71, 2867),

Gene: Synopsis_1 Start: 746, Stop: 1114, Start Num: 27

Candidate Starts for Synopsis_1:

(Start: 27 @746 has 48 MA's), (55, 944), (65, 1022), (68, 1049), (71, 1064), (72, 1073),

Gene: TaidaOne_1 Start: 148, Stop: 492, Start Num: 33

Candidate Starts for TaidaOne_1:

(29, 139), (Start: 33 @148 has 84 MA's), (44, 235), (50, 268), (51, 295), (72, 445),

Gene: Talon44_8 Start: 3234, Stop: 3590, Start Num: 33

Candidate Starts for Talon44_8:

(Start: 33 @3234 has 84 MA's), (51, 3381), (54, 3396), (60, 3438), (65, 3480), (72, 3531), (76, 3564),

Gene: Tanis_7 Start: 2597, Stop: 2953, Start Num: 33

Candidate Starts for Tanis_7:

(Start: 33 @2597 has 84 MA's), (48, 2702), (51, 2744), (54, 2759), (65, 2843), (72, 2894), (76, 2927),

Gene: Tatanka_1 Start: 686, Stop: 1054, Start Num: 27

Candidate Starts for Tatanka_1:

(Start: 27 @686 has 48 MA's), (55, 884), (65, 962), (71, 1004), (72, 1013),

Gene: Teacup_2 Start: 748, Stop: 1116, Start Num: 27

Candidate Starts for Teacup_2:

(Start: 27 @748 has 48 MA's), (55, 946), (65, 1024), (71, 1066), (72, 1075),

Gene: TenaciousP_11 Start: 5878, Stop: 6231, Start Num: 33

Candidate Starts for TenaciousP_11:

(Start: 33 @5878 has 84 MA's), (48, 5980), (62, 6097), (65, 6121), (70, 6157), (72, 6172), (76, 6205),

Gene: Tenney120_2 Start: 721, Stop: 1098, Start Num: 27

Candidate Starts for Tenney120_2:

(24, 712), (Start: 27 @721 has 48 MA's), (55, 922), (65, 1000), (68, 1027), (72, 1051), (73, 1075),

Gene: Tenno_2 Start: 2000, Stop: 2368, Start Num: 27

Candidate Starts for Tenno_2:

(Start: 27 @2000 has 48 MA's), (55, 2198), (65, 2276), (71, 2318), (72, 2327),

Gene: Thiqqums_1 Start: 190, Stop: 537, Start Num: 33

Candidate Starts for Thiqqums_1:

(Start: 33 @190 has 84 MA's), (50, 310), (51, 337), (65, 436), (68, 463), (72, 487),

Gene: TieDye_1 Start: 148, Stop: 492, Start Num: 33

Candidate Starts for TieDye_1:

(29, 139), (Start: 33 @148 has 84 MA's), (44, 235), (50, 268), (51, 295), (72, 445),

Gene: Tokki_1 Start: 605, Stop: 976, Start Num: 27

Candidate Starts for Tokki_1:

(Start: 27 @605 has 48 MA's), (55, 803), (65, 881), (71, 923), (72, 932),

Gene: TonyStarch_1 Start: 148, Stop: 492, Start Num: 33

Candidate Starts for TonyStarch_1:

(29, 139), (Start: 33 @148 has 84 MA's), (44, 235), (50, 268), (51, 295), (72, 445),

Gene: Tribby_3 Start: 736, Stop: 1083, Start Num: 31

Candidate Starts for Tribby_3:

(28, 727), (Start: 31 @736 has 19 MA's), (56, 910), (72, 1036),

Gene: TrixiePhattel_2 Start: 665, Stop: 1051, Start Num: 27

Candidate Starts for TrixiePhattel_2:

(24, 656), (Start: 27 @665 has 48 MA's), (55, 869), (65, 947), (68, 974), (72, 998),

Gene: Truckee_1 Start: 635, Stop: 1003, Start Num: 27

Candidate Starts for Truckee_1:

(Start: 27 @635 has 48 MA's), (46, 758), (55, 833), (65, 911), (71, 953), (72, 962),

Gene: Trufflozitus_7 Start: 3034, Stop: 3399, Start Num: 33

Candidate Starts for Trufflozitus_7:

(Start: 33 @3034 has 84 MA's), (48, 3139), (51, 3181), (54, 3196), (65, 3280), (72, 3331), (76, 3364),

Gene: Trustiboi_1 Start: 767, Stop: 1135, Start Num: 27

Candidate Starts for Trustiboi_1:

(Start: 27 @767 has 48 MA's), (55, 965), (65, 1043), (71, 1085), (72, 1094),

Gene: Untouchable_10 Start: 4601, Stop: 4954, Start Num: 33

Candidate Starts for Untouchable_10:

(Start: 33 @4601 has 84 MA's), (48, 4703), (62, 4820), (65, 4844), (70, 4880), (72, 4895), (76, 4928),

Gene: Uzumaki_2 Start: 721, Stop: 1098, Start Num: 27

Candidate Starts for Uzumaki_2:

(24, 712), (Start: 27 @721 has 48 MA's), (55, 922), (65, 1000), (68, 1027), (72, 1051), (73, 1075),

Gene: Vardy_11 Start: 5674, Stop: 6027, Start Num: 33

Candidate Starts for Vardy_11:

(Start: 33 @5674 has 84 MA's), (48, 5776), (51, 5818), (62, 5893), (65, 5917), (70, 5953), (72, 5968), (76, 6001),

Gene: Xenomorph_2 Start: 736, Stop: 1083, Start Num: 31

Candidate Starts for Xenomorph_2:

(28, 727), (Start: 31 @736 has 19 MA's), (56, 910), (72, 1036),

Gene: Yotsuba_5 Start: 2151, Stop: 2507, Start Num: 34

Candidate Starts for Yotsuba_5:

(11, 1998), (19, 2049), (30, 2139), (32, 2145), (Start: 34 @2151 has 7 MA's), (59, 2349), (67, 2421), (71, 2442),

Gene: Zeina_2 Start: 731, Stop: 1108, Start Num: 27

Candidate Starts for Zeina_2:

(24, 722), (Start: 27 @731 has 48 MA's), (55, 932), (65, 1010), (68, 1037), (72, 1061), (73, 1085),

Gene: Zeph_10 Start: 4860, Stop: 5213, Start Num: 33

Candidate Starts for Zeph_10:

(Start: 33 @4860 has 84 MA's), (48, 4962), (62, 5079), (65, 5103), (70, 5139), (72, 5154), (76, 5187),

Gene: Zippen_2 Start: 867, Stop: 1235, Start Num: 27

Candidate Starts for Zippen_2:

(Start: 27 @867 has 48 MA's), (55, 1065), (65, 1143), (71, 1185), (72, 1194),